

# PATENT MAIL STOP MISSING PARTS

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re

Michael L. Friedman et al.

Group Art

Unit:

1714

Serial No.:

Appln. of:

10/607,743

Conf. No.:

7569

Filed:

27 June 2003

Examiner:

Not yet assigned

For:

Compositions Comprising Mineralized

Atty Docket

D0932-00356

Ash Fillers

No.:

(VW-8777)

## INFORMATION DISCLOSURE STATEMENT

This Information Disclosure Statement is being filed in connection with the patent application referenced above. This Statement is being filed:

Before the mailing date of a first Office action on the merits for this application. [X]

# **Provision of Copies**

A copy of each of the references listed on the attached Form PTO-1449 is enclosed [X]herewith and forms a part hereof.

#### Fee

No fee is believed due in connection with filing of this Statement. However, in the event [X]a fee or refund is due, the Commissioner is authorized to charge any fee associated with this communication or credit any overpayment to Deposit Account No. 04-1679 (billing reference D0932-00356).

Respectfully submitted,

MICHAEL E FRIEDMAN et al.

D. Colby, Ph.D. J.D.

Registration Number 40,961

Customer Number 08933

Duane Morris LLP

One Liberty Place

Philadelphia, PA 19103-7396

Telephone

215-979-1000

Direct

215-979-1849

Facsimile

215.979.1020

Electronic Mail GDColby@DuaneMorris.com

PTO/SB/08A (02-03)

Approved for use through 04/30/2003. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

NOV 2 0 2003

Sheet 1

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known				
Application Number	10/607,743			
Filing Date	27 June 2003			
First Named Inventor	Michael L. Friedman			
Art Unit	not yet assigned			
Examiner Name	not yet assigned			
Attorney Docket Number	D0932-00356			

		<del></del>	U. S. PATEN	T DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (f known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	-	US- 4,130,627	12-19-1978	Russ et al.	
		<sup>US-</sup> 5,866,641	02-02-1999	Ronden et al.	
		US- 5,988,396	11-23-1999	Minkara et al.	
		<sup>US-</sup> 6,465,543 B1	10-15-2002	Alexandre et al.	
		<sup>US-</sup> 6,518,324 B1	02-11-2003	Kresta et al.	
		US-			
-		US-			
		US-			
-		US-			
	<del>                                     </del>	US-			
		US-			

Examiner Cite Initials* No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages		
	110.	Country Code <sup>3</sup> "Number <sup>4</sup> "Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	1
						┢
						Ļ
						₽

			_
Examiner	Date		
Signature	Considered		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (02-03) Approved for use through 04/30/2003. OMB 0651-0031

5 0 500	der the Paperwork Red	uction Ad	t of 1995, no persons ar	e required to respond to a collection	of information unless it contains a valid OMB control numb	er.
	te form 1449/PTO				Complet if Known	
	. 7			Application Number	10/607,743	
THE C	ÓRMATION	DIS	CLOSURE	Filing Dat	27 June 2003	
STATEMENT BY APPLICANT				First Named Inventor	Michael L. Friedman	
	(Use as many she	ate se n	ocassani)	Art Unit	1714	
	(Ose as many site	1013 03 11	ecessary)	Examiner Name	not yet assigned	
Sheet	2	of	4	Attorney Docket Number	D0932-00356	

		OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		ANONYMOUS, web page accessed 19 May 2003 at www.nanoclay.com, "Cloisite®"	
		ANONYMOUS, web page accessed 19 May 2003 at www.nanocor.com/benefits_tech.asp, "Polymer Benefits"	
		BOWMAN et al., 2000, Particle Shape Characterisation using Fourier Analysis, CUED/D-Soils/TR315	
		BROMBACHER et al., 1998, Appl. Environ. Microbiol., 64(4):1237-1241	
		CHIANG et al., 2001, Separat. Sci. Technol. 36(10); 2327-2339 (Abstract only)	
		CHUSID et al., April 2003, The Construction Specifier, 36-48	
		DREVIN et al., 2002, Proc. ISMM2002, 315-325	
		FONT et al., web page accessed 19 May 2003 at www.flyash.info, "Occurrence and distribution of valuable metals in fly ash from Puertolano IGCC power plant, Spain"	
		GARDNER, April 4, 2002, "Firms Lay Financial Foundation Resting on Nanoclay Composites", Small Times Correspondent	
		GILLS, 1993, NIST Standard Reference Material 1633b, "Constituent Elements in Cool Fly Ash"	

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

PTO/SB/08B (02-03)

Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute form 1449/PTO Applicati n Number 10/607,743 INFORMATION DISCLOSURE **Filing Date** 27 June 2003 STATEMENT BY APPLICANT **First Named Inventor** Michael L. Friedman Art Unit 1714 (Use as many sheets as necessary) **Examiner Name** not yet assigned Attorney Docket Number Sheet ٥f 4 D0932-00356

Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue	T <sup>2</sup>
		number(s), publisher, city and/or country where published.  HEGGLI et al., 2001, "Research Plan-Elastomeric Nanocomposites," Eidgenössische Technische Hochschule Zürich	
		JAKOB et al., Feb. 1, 1999, "Removal of Heavy Metals from Municipal Solid Waste Incinerator Fly Ash: the CT-FLUAPUR PROCESS," paper presented at the Recovery, Recycling, Re-integration Congress	
		JAKOB et al., web page accessed 27 May 2003 at www.bb-power.ch/news/News_Fluapur_e.htm (Abstract only)	
		KAZONICH et al., date unknown, "The Release of Common Metals from Fly Ash During Leaching by Low PH Liquids," U.S. Dept. Energy Technol. Lab., Environ. Sci. Technol. Div., Pittsburgh, PA (Abstract only)	
		BRANDL et al., April 17, 2003, web page accessed 23 May 2003 at www.research-projects.unizh.ch/math/unit 72300/area81/p786. htm, "Microbial metal mobilization and recovery from solid metal-containing materials"	
		BRANDL et al., April 17, 2003, web page accessed 23 May 2003 at www.research-projects.unizh.ch/math/unit 72300/area81/p786. htm, "Microbial metal mobilization and recovery from solid metal-containing materials"	
		LAN et al., June 25-27, 2001, "Applications of Nanomer® in Nanocomposites: from Concept to Reality," presentation at the Nanocomposites 2001 conference, Chicago, IL	
		LUTZ et al., web page accessed 23 May 2003 at lem.web.psi.ch/w_fluapu.htm, "Evaporation of Heavy Metals from Filter Ash of Waste Incinerators"	
		MALLOY et al., 2001, "High Carbon Fly Ash/Mixed Thermoplastic Aggregate for Use in Lightweight Concrete", Recycled Materials Resource Center, Research Project 19.	
		MCGARVEY et al., 1985, "Removal and Recovery of Metals by Ion Exchange, " 23rd Annual Libery Bell Corrosion Course 4.	

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

PTO/SB/08B (02-03)

D0932-00356

Approved for use through 04/30/2003. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. C mplet if Known Substitute for form 1449/PTO **Application Number** 10/607,743 INFORMATION DISCLOSURE **Filing Date** 27 June 2003 STATEMENT BY APPLICANT **First Named Inventor** Michael L. Friedman Art Unit 1714 (Use as many sheets as necessary) Examiner Name not yet assigned

Attorney Docket Number

		OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		NANOCOR, Publication G-100, Date Unknown, "General Information About Nanomers®"	
		NANOCOR, Publication T-16, Date Unknown, "Nanocomposites Using Special Purpose Nanomers"	
		NANOCOR, Publication Lit.P-807, October 2002, "Polyolefin Nanocomposites"	
		NANOCOR, Publication T-11, Aug. 2001, "Epoxy Nanocomposites Using Namomers®I.30E"	
		QIAN et al., February 25-28, 2001, "Preparation and Properties of Polyolefin Nanocomposites", Technical Papers presented at Polyolefins 2001 conference, Houston, TX	
		SCHULER et al., Date Unknown, "Forschung: Thermische Separation," Paul Scherrer Institut, Publ. No. PSI-INFO ENE-Old	
		SCHUT, September 1999 "Compounding Close-up Fly-Ash Filler Stages a Comeback," Plastics Technology Online Article.	
		Sphere Services, Inc. web page accessed 16 May 2003 at www.sphereservices.com/ "Cenospheres"	
·			

Examiner	Date	
Signature	Considered	

Sheet

of 4

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.